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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,931	10/09/2003	Arthur Richard Metcalf	MIC-46 (P50-0118)	7750
34043	7590	07/14/2006	EXAMINER	
DORITY & MANNING, PA & MICHELIN NORTH AMERICA, INC			KNABLE, GEOFFREY L	
P O BOX 1449			ART UNIT	
GREENVILLE, SC 29602-1449			PAPER NUMBER	

1733

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/681,931

Applicant(s)

METCALF ET AL.

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1733

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 14 have been amended to define coupling "at least one pair" of terminals, embedding "at least a portion of at least one" of the terminals and that "at least a portion of at least one" of the terminals is secured in rubber. The original disclosure however simply describes that a pair of terminals are connected to the battery and exposed outside the patch, not "at least one pair", "at least a portion of at least one...", etc. as now claimed. As such, this is considered to represent subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is considered to be new matter.

3. Claims 1, 2, 6, 11, 14, 15, 19 and 24 are rejected under 35 U.S.C. 103(a) as obvious over Kulka et al. (US 6,087,930) or Lee, Jr. et al. (US 5,731,754) taken in view of Frey et al. (US 5,749,984 - newly cited) and at least one of [Maleyko (US 5,228,686 - newly cited) and Ko et al. (US 6,438,193 - newly cited)].

Kulka et al. and Lee, Jr. et al. are applied for the same reasons as set forth in the last office action. As to the new claim language requiring connecting terminals that are apparently exposed outside the rubber so that an electric device can be coupled thereto, Kulka et al. and Lee, Jr. provide a power source/battery but do not provide externally accessible terminals.

Rechargeable batteries being extremely well known in general as well as even being contemplated in this art (e.g. col. 7, lines 58-60 of Frey et al.), it is considered to have been obvious to use a rechargeable battery for the battery in the primary references - the advantages of rechargeable batteries would have been readily understood by the artisan. When using a rechargeable battery it further would have been understood that an external connection from the battery terminals to an electric device to be able to recharge the battery would have been desirable if not necessary, the reference to Maleyko (esp. figs. 5-7), which is also directed to a device including a battery encased in a rubber material, providing evidence that the artisan appreciates that allowing external connection to the battery to recharge is suitable and effective. Ko et al. further provides evidence that the artisan, even if desiring to effect recharging using tire motion (as mentioned by Frey et al.), would have found it obvious to provide such tire motion generated power in the form of externally connected devices (esp. fig. 3A). It thus is considered to have been obvious to utilize a rechargeable battery in the primary references and in using such, it is considered to have been obvious to provide an external accessibility to the terminals to allow recharging.

Art Unit: 1733

4. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulka et al. (US 6,087,930) or Lee, Jr. et al. (US 5,731,754) taken in view of Frey et al. (US 5,749,984 - newly cited) and at least one of [Maleyko (US 5,228,686 - newly cited) and Ko et al. (US 6,438,193 - newly cited) as applied above, and further in view of Rensel et al. (US 6,474,380) as applied in the last office action.

5. Claims 4, 5, 7-10, 12, 13, 17, 18, 20-23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulka et al. (US 6,087,930) or Lee, Jr. et al. (US 5,731,754) taken in view of Frey et al. (US 5,749,984 - newly cited) and at least one of [Maleyko (US 5,228,686 - newly cited) and Ko et al. (US 6,438,193 - newly cited) as applied above, and further in view of Adamson et al. (US 2004/0159383) as applied in the last office action.

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendments to the claims.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


Art Unit: 1733

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
July 9, 2006